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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,035	08/19/2004	Chien-Ming CHEN	HANP0002USA	5034

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EXAMINER	
CHEN, WEN YING PATTY	
ART UNIT	PAPER NUMBER
2871	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/711,035	CHEN ET AL.	
	Examiner	Art Unit	
	W. Patty Chen	2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 November 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2 and 4-14* is/are pending in the application.

4a) Of the above claim(s) *14* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2 and 4-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 August 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

Applicant's Amendment filed on Nov. 9, 2006 has been entered. Claim 3 is cancelled per the Amendment filed, therefore, claims 1, 2 and 4-14 remain pending in the current application but claim 14 is withdrawn from consideration.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-2, 4-8 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hou et al. (US 2005/0057716) in view of Wang et al. (US 2004/0263767) further in view of Nakahara et al. (US 2002/0033926).

With respect to claim 1 (Amended): Hou et al. disclose in Figures 7-9 and Paragraphs 0046-0050 a repairing method for a liquid crystal display panel comprising providing pressure to the two opposite surfaces of the liquid crystal display panel (element 310) (Paragraph 0068; wherein external pressure is provided for discharging the excessive liquid crystal), removing a sealant (element 311) in a liquid crystal injection area (element 313); cleaning the pressed-out liquid crystal; sealing the liquid crystal injection area with a fresh sealant (element 314) and curing the fresh sealant (Paragraph 0050).

Hou et al. fail to specifically disclose that pressure is continuously exerted on the substrates when applying the fresh sealant and that a sealant outside a liquid crystal injection area is removed.

However, Wang et al. disclose in Paragraph 0005 a liquid crystal repairing method comprising applying a first, second and third pressure in order to discharge the excess liquid crystal and further applying a fourth pressure when applying a sealing, and then remove all pressure and Nakahara et al. teach in Figure 3 that after applying the sealant (element 50) to the liquid crystal injection area (40a), the excessive sealant outside the liquid crystal injection area is removed.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to repair a liquid crystal display panel with the method taught by Hou et al. wherein a pressure is exerted on the substrates of the display panel when applying a sealant post discharging the excessive liquid crystal as taught by Wang et al., since upon releasing the pressure the sealant will be sucked into the opening, thus a reliable sealant can be obtained and wherein the sealant is removed outside a liquid crystal injection area as taught by Nakahara et al., since Nakahara et al. teach that by removing the excessive sealant material outside the liquid crystal injection area helps to unify the contour of the display panel (Paragraph 0059).

As to claim 2: Hou et al. further disclose in Figures 7-9 that the liquid crystal injection area (element 313) is a liquid crystal injection hole (the liquid crystal injection area is capable of being a liquid crystal injection hole when the liquid crystal dropped onto the substrate is insufficient).

As to claim 4: Hou et al. further disclose in Figures 7-9 that the liquid crystal injection area is a portion of a sealing area of the liquid crystal display panel, and an auxiliary structure (elements 313a, 313b) is formed at an edge of the liquid crystal display panel beside the portion of the sealing area (element 313).

As to claim 5: Hou et al. further disclose that the auxiliary structure is formed by filling a gap of the liquid crystal display panel with an ultraviolet sensitive material and curing the ultraviolet sensitive material (Paragraph 0050, it is obvious that the auxiliary structures are formed the same time as forming the sealing material).

As to claim 6: Hou et al. further disclose in Paragraph 0048 that the liquid crystal display panel is filled up with the liquid crystal utilizing a one-drop-fill method.

As to claim 7: Hou et al. further disclose in Paragraph 0009 that the repairing method is used for repairing an uneven defect on the liquid crystal display panel caused by a gravity issue.

As to claim 8: Hou et al. further disclose in Paragraph 0047 that the step of removing the sealant in the liquid crystal injection area utilizes a laser to burn down the sealant.

As to claims 12 and 13: Both Hou et al. and Wang et al. disclose that pressure is exerted on the substrates for forcing the discharge of the excess liquid crystal, it is thus considered that the exerted pressure on the substrates being the first, second and third pressures, which are equal.

Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hou et al. (US 2005/0057716), Wang et al. (US 2004/0263767) and Nakahara et al. (US 2002/0033926) in view of Sasaki et al. (US 7086175).

Hou et al., Wang et al. and Nakahara et al. disclose all of the limitations set forth in the previous claims, but fail to specifically disclose that when providing the first, second and third pressure the temperature is maintained at 20 to 80°.

However, Sasaki et al. disclose in Column 8 lines 6-21 a repairing method of liquid crystal panel in which when providing pressure, the temperature is maintained at 50-80° (which is within the specified range of 20-80°).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to repair a liquid crystal display panel with the method taught by Hou et al., Wang et al. and Nakahara et al. wherein when providing the first, second and third pressure the temperature is maintained at 50-80° as taught by Sasaki et al., since Sasaki et al. teach that at

such temperature makes discharge of the excess of the liquid crystal from the panel assembly easy (Column 8, lines 21-25).

Response to Arguments

Applicant's arguments filed on Nov. 9, 2006 have been fully considered but they are not persuasive. Applicant argues that claim 1 has been amended to include the previously indicated allowable subject matter of claim 3. However, the amended claim 1 failed to include all of the limitations of claim 3, therefore, claim 1 is not made allowable by the amendment.

Applicant's arguments with respect to all claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to W. Patty Chen whose telephone number is (571)272-8444. The examiner can normally be reached on 8:00-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David C. Nelms can be reached on (571)272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

W. Patty Chen
Examiner
Art Unit 2871

WPC
1/17/07

ANDREW SCHECHTER
PRIMARY EXAMINER